Creel Census - Pend Oreille Lake F-3-R-2

by

Paul Jeppson
Assistant Fisheries Biologist
October, 1953

COMPLETION REPORT

INVESTIGATIONS PROJECTS

STATE OF IDAHO			
PROJECT NO F 3-R-2	Work Plan No. <u>II</u>	Job No.	1
TITLE OF JOBCreel C	Census - Pend Oreille Lake		
OBJECTIVES :			

To determine:

- 1. The number of fish caught during the 1952 season.
- 2. The quality of fishing as measured in terms of fish caught per hour.
- 3. The relative number of resident, non-resident, and commercial fishermen.
- 4. The total catch and catch per hour of each group (resident,

non-resident, and commercial)

5. The type of fishing, bait, and gear.

TECHNIQUES USED:

The creel census was conducted during 1952 with the same sampling plan as adopted for the 1951 study. (For a detailed description of Lake Pend Oreille and an explanation of the scope of the study see the 1951 completion report, entitled <u>Fisheries</u> <u>Investigations of Lake Pend Oreille</u>, Idaho.)

As in 1951 the fishing season was stratified by months and days of the week-for the convenience of censusing and economy of operation. One Saturday, one Sunday and three weekdays were censused in each of the four areas of the lake during each month from April through October. Censusing was discontinued at the end of October with the cessation of kokanee fishing. Prior to April the small amount of fishing which occurred for whitefish did not warrant initiation of the census. Some trout fishing was done during November, however. Census days and order of sampling sections were selected by a random process. Creel census personnel were stationed at resorts and other landings in the areas shown on the accompanying map. Proportionate adjustments were made to the final daily tabulations to allow for fishermen who were known to have fished but were not interviewed by creel census personnel or by resort operators.

A new creel census form (See Figure 1) was adopted for the 1952 study. The form is identical to the one used during 1951 except space for recording whether or not the fishermen had fished in the lake previously during 1952, type of fish sought, method of fishing, and type of tackle used were also included. Compilations of the latter group of data are not available at this time. A more simplified form was adopted for use by resort operators (See Figure 2.)

Mr. Daniel R. Embody was retained by the Department of Fish and Game for tabulation and analysis of creel census data.

FINDINGS:

A tabulation of days censused and data obtained are recorded in Appendix A. These data constitute random samples of numbers of fishermen, hours of effort, and catch of all species. By applying these data to the entire period of census, estimates were made of total utilization and harvest of kokanee, trout, and whitefish. Estimated catches of warm water fish and non-game species are not available at this time.

Some 58,000 fishermen fished a total of 309,000 hours to obtain approximately 515,000 kokanee, 8,800 trout, and 1,200 whitefish. Total estimated utilization of the fishery and resulting harvest of kokanee, trout, and whitefish are recorded in Table I.

Table I. Total estimated utilization by <u>all</u> fishermen and their harvest of kokanee, trout, and whitefish, Lake Pend Oreille, Idaho, 1952

Month	Fisher- men	Hours	Total Salmonids	Kokanee	Cut- throat	Dolly Varden	Rain- bow	White- fish
April	3,689	19,132	14,379	14,379	0	0	0	836
May	7,607	40,676	128,468	126,979	444	948	97	201
June	11,087	54,847	109,941	107,521	1,779	476	165	84
July	11,357	58,871	81,448	79,405	1,632	274	137	27
August	8,603	45,361	40,445	39,056	1,113	195	81	20
Sept.	8,286	47,330	67,081	66,172	589	273	47	4
October	7,185	41,633	81,929	81,401	293	227	8	0
Total	57,814	308,850	523,691	514,913	5,850	2,393	535	1,172

Resident sport fishermen made up 46 per cent of the total and harvested 36 per cent of the salmonids and whitefish as shown in Table II.

Table II. Total estimated utilization by <u>resident</u> sport fishermen and their harvest of kokanee, trout, and whitefish, Lake Pend Oreille, Idaho, 1952.

	Fisher-		Total		Cut-	Dolly	Rain-	White-
Month	men	Hours	Salmonids	Kokanee	throat	Varden	bow	fish
	0.500		0.045	0.045	•	•	•	
April	2,699	14,044	8,247	8,247	0	0	0	389
May	4,948	24,419	46,731	45,547	366	758	60	172
June	4,853	23,542	44,212	43,134	715	284	79	57
July	5,053	24,847	33,206	32,406	656	70	74	4
August	3,306	15,738	11,915	11,387	409	90	29	20
Sept.	3,178	16,065	19,331	18,966	195	147	23	0
Oct.	2,799	14,884	24,241	23,970	145	126	0	0
Total	26,836	133,539	187,883	183,657	2,486	1,475	265	642

Non-resident sport fishermen made up 52 per cent of the total and harvested 52 per cent of the salmonids and whitefish as shown in Table III.

Table III. Total estimated utilization by <u>Non-resident</u> sport fishermen and their harvest of kokanee, trout, and whitefish, Lake Pend Oreille, Idaho, 1952

			<u> </u>					•
	Fisher	<u>-</u>	Total		Cut-	Dolly	Rain-	White-
Month_	men_	Hours _	Salmonids _	Kokanee _	throat	Varden	bow	fish
April	761	3,865	855	855	0	0	0	396
May	2,344	13,651	33,124	33,846	78	163	37	5
June	6,126	30,690	62,027	60,692	1,057	192	86	15
July	6,165	34,262	45,594	44,363	972	204	55	23
August	5,198	29,126	26,751	25,890	704	105	52	0
Sept.	5,071	31,029	46,576	46,039	394	119	24	4
Oct.	4,386	26,749	57,688	57,431	148	101	8	0
Totals	30,051	169,372	272,615	268,116	3,353	884	262	443

Commercial fishermen made up two per cent of the total and harvested 12 per cent of the salmonids and whitefish as shown in Table IV.

Table IV. Total estimated utilization by <u>commercial</u> fishermen and their harvest of kokanee, trout, and whitefish, Lake Pend Oreille, Idaho, 1952.

	Fisher-	-	Total		Cut-	Dolly	Rain-	White-
Month	men	Hours	Salmonids	Kokanee	throat	Varden	bow	fish
April	229	1,223	5,277	5,277	0	0	0	51
May	315	2,606	48,613	48,586	0	27	0	24
June	108	615	3,702	3,695	7	0	0	12
July	139	762	2,648	2,636	4	0	8	0
August	99	497	1,779	1,779	0	0	0	0
Sept,	37	236	1,174	1,167	0	7	0	0
Oct.	0	0	0	0	0	0	0	0
Total	927	5,939	63,193	63,140	11	34	8	87

Comparative rates of catch in fish per hour for resident and non-resident sport fishermen and commercial fishermen are shown in Table V.

Table V. Comparative average rates of catch of fishermen in fish per hour, Lake Pend Oreille, Idaho, 1952.

Month	All Fishermen	Resident Sport	Non-resident	Commercial
April	0.8	0.6	0.3	4.4
May	3.2	1.9	2.4	18.7
June	2.0	1.9	2.0	6.0
July	1.4	1.3	1.3	3.5
August	0.9	0.8	0.9	3.6
September	1.4	1.2	1.5	5.0
October	2.0	1.6	2.2	_
Feb Oct	1.7	1.4	1.6	10.7

ANALYSIS AND RECOMMENDATIONS:

Late-winter fishing for kokanee in Lake Pend Oreille did not materialize as in 1951. Creel census data for the period April through October 1952 were otherwise relatively similar to data obtained during the same period in 1951. Length of the season during which kokanee were available to the fishermen appeared to have an important bearing on the annual harvest. Lake levels and water temperatures during the period of census are recorded in Appendix B. Climatological data for 1951 and 1952 are recorded in Appendix C.

It is recommended that the creel census be continued through succeeding years for as long a period as necessary in order to obtain all possible evidence regarding the average annual harvest of kokanee and trout prior to and following any effects which Albeni Falls and Cabinet Gorge Dams may have upon the reproduction of these species. It is possible that the effect of partial blocking of spawning runs at Cabinet Gorge during 1951 may be exhibited by creel census as early as the 1954 fishing season.

SUMMARY:

During the period from April to October 1952 some 58,000 fishermen fished about 309,000 hours in Lake Pend Oreille to obtain approximately 515,000 kokanee, 8,800 trout, and 1,200 whitefish. Approximately 36 per cent of the harvest was by resident sport fishermen, 52 per cent by non-resident sport fishermen, and 12 per cent by commercial fishermen. Reduced utilization and harvest during 1952 as compared to 1951 appears to be due principally to the shorter season during which kokanee were available to the fishermen.

DATA AND REPORTS:

Basic data and reports regarding the 1952 creel census are on file in the office of the Idaho Fish and Game Department, Boise, Idaho, or in the files of the District Fisheries Biologist, Route 1, Sagle, Idaho.

Prepared by:	Approved by:
Paul Jeppson Assistant Fisheries Biologist	IDAHO FISH AND GAME DEPARTMENT
_	By
October, 1953	Ross Leonard, Director
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APPENDIX I

STATE OF IDAHO

DEPARTMENT OF FISH & GAME

Research Report

PEND OREILLE LAKE CENSUS 1952

D. J. Project 3-R-2

<u>Title:</u> Tabulation of Census Data by Days

Author: Daniel R. Embody, Consulting Statistician

Date: April 1, 1953

INTRODUCTION

In 1952 as in 1951 an intensive creel census was conducted on Pend Oreille Lake in North Idaho. The Census was sponsored by the Fish and Game Department of the State of Idaho under Federal Aid Project D. J. F 3-R-2 with assistance given by the Washington Water Power Company, the Bonner County Sportsmen's Association, and nearly every resort owner around the lake. The purpose of this report is to summarize the methods and data of the 1952 census.

The writer has been retained as a statistical consultant in this investigation by the Fish and Game Department. Responsibilities of this position involve the planning of field work and the analysis and interpretation of census data. On May 15, 1952, Mr. Tim Vaughan, the field director of the census, left the employ of the Fish and Game Department. During the period May 15 to June 15 the writer was employed jointly by the Fish and Game Department and the Washington Water Power Company to direct field operations, After June 15 Mr. Paul Jeppson, fishery biologist, assumed direction of the census for the remainder of the season. Assisting Mr. Jeppson from June through September was Mr. Mel Lantz, biologist.

GENERAL PLAN OF THE CENSUS

The census for 1952 was planned to yield data which would be comparable with data collected in 1951 and with data to be collected in 1953 and future years. Sampling techniques were employed which sampled both the lake and the season. The general sampling plan was identical with the one used in 1951 except that a new order and new days were assigned at random.

The lake was subdivided into the same four areas that were used in 1951; namely, (I) Hope-Trestle Creek, (II) Sandpoint, (III) Garfield Bay, and (IV) Bayview. The attached map shows the boundaries of the four areas. It should be noted that the boundary of section I was changed somewhat to exclude any of the west shore of the lake. The map in reference (1) shows that in 1951 some shoreline between Bottle Bay and Garfield Bay was included in the Hope-Trestle Creek section. Since no fishing was reported from this area in 1951 the change has no effect on the comparableness of the data. In future years, however, this shoreline may be used by fishermen and would thus have to be sampled. Including it as part of the Hope-Trestle Creek section would require extra manpower and automobile travel, whereas attached to the Garfield Bay section, this shoreline can be covered by the regular crew with only a modest increase in automobile mileage.

The season was stratified according to calendar months. For each section of the lake one Sunday, one Saturday and Three weekdays were designated each month for counting fish. Considering the four sections and the five days, counting was performed somewhere on the lake during 20 days each month. Standard biometric procedures and tables of random numbers were used in randomizing the days assigned to the census and order of sampling sections. -2

Although a careful watch was maintained on the lake during February and March, the kokanee were not biting and practically no fishing effort was exerted on the lake. Under these conditions it was judged that the catch was too small to warrant the census for these months. By April 1 the situation had not changed, but it was thought advisable to begin the census in anticipation of increased fishing effort during the month.

By October 31 kokanee fishing had ceased, although trout were being caught regularly. It was decided at that time that the overall catch during November would be too small to u warrant the census. Thus on October 31 all field operations for the year were terminated. It is possible that a few hundred trout were missed by the termination, but the comparableness of the data between years was not affected.

CENSUS DATA AND ADJUSTMENTS

For 1952 new census forms were originated to overcome some of the difficulties encountered in 1951. The most common complaint was from the cooperating resort owners, who felt that the forms were too complicated. A separate form was set up for resort owners which called for only the most essential data and which could hold the records of over 20 fishermen. A more comprehensive form was developed for use by the men employed by the census. Sample copies of each of these forms are included immediately before the data tables.

On each census day for each area an attempt was made to contact all fishermen as they left the lake. Records were made of all data specified in the blanks, In this report a tabulation of the basic data only will be considered. These items are:

- 1. Classification of fishermen (resident, non-resident, or commercial)
- 2. Hours of effort expended (actual hours of fishing)
- 3. Number and species of salmonids and whitefish caught.

Tabulations and interpretations of the other items of data collected will be given in a later report.

In all census work of this type some fishermen are completely missed. In the opinion of the writer, it is doubtful that the number missed during the season exceeded one per cent. This point, however, is somewhat controversial and undoubtedly will be studied in more detail at a later date.

At times during the season fishermen swarmed ashore in droves, and counts of some catches were missed, although the number of fishermen was known. In all such cases the interviewers were instructed to make a notation on their data sheets of any catches missed so that later adjustments could be made.

Adjustments of the figures for catch and hours of effort where these omissions occurred were made on a simple proportion basis. Of all the fishermen interviewed, the percentages of resident, non-resident and commercial were determined. These percentages were then applied to the total number of fishermen missed to obtain a break-down by classes. Where fractional numbers of fishermen resulted, the fractions were rounded off to the nearest whole number according to standard statistical procedure.

For each classification (resident, non-resident and commercial) the number of hours per fisherman and the number of fish per fisherman by species were calculated for the fishermen interviewed. These ratios were then applied to the appropriate class of fishermen who were missed to estimate the hours and fish not recorded. Again standard statistical procedures for rounding off to nearest whole numbers were used.

In the report for 1951, reference (1), a detailed example is given of the method by which the adjustments were made. For further information concerning the adjustments made to the data, the reader is referred to this earlier report.

TABULATION OF CENSUS DATA BY DAYS

In the following pages of this report are given summaries of the adjusted census data by census days. That is, for each census day the totals of all fishermen, hours, and fish are shown according to the classifications described above. Should the reader have any questions as to these data, he is invited to communicate with the author.

Daniel R. Embody Consulting Statistician W 5012 Hoffman Place Spokane, Washington

References:

(1) Embody, Daniel R. Tabulation of census data by days., Research Report, Pend Oreille Lake Census 1951, dated November 29, 1951.

IDAHO DEPARTMENT FISH & GAME 1952 Creel Census

Lake	Station
Date	Weather
·	Water Temp.

	T	T		T	T	T	
Indicate -							
Resident(R) Non-Resident(NR)	Kokanee		Char	Rainbow	Eastern		
or Commercial (C		Cutthroat	Doll Varden)	(Kamloops)		Other	Hours
	(222,222)						
-							
-							
-							

IDAHO DEPT. OF FISH AND GAME 1952 CREEL CENSUS

(Use only ONE Column per Fisherman)

LAKE		DATE												
SECTION		WATER TEMP												
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Resident	$\overline{}$	LINE	11 1 1 1 1	JIILIU	VILA (D)	1111	l Lic	LINDL						
Non-Resident														
Commercial														
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Hours														
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Kokanee Silver				NUMB	ER OF	FISH	CAUG	нт						
Cutthroats	+													
	+								-				-	
Dolly Varden	+													
Rainbow Whitefish	+													
Wniterish Perch	+												-	
Crappie	+													
Bass Squawfish	+													
Squawrish														
NUM Census Interviews	IBER OI	F PRE	VIOUS	INTE	RVIEW	S & TR	IPS O	N LAF	KE IN	1952				
Tot. Prev. Trips														
100. 1100. 111pb														
			7	ГҮРЕ	OF FI	SH SO	UGHT							
Kokanee														
Trout														
Other														
		1										-		-
				METI	IOD OF	FISH	ING							
Trolling														
Still Fishing														
Casting														
Shore														
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Multi-Bd. Flasher														
Single Spoon														
Kamloops Tackle														
Maggots or Bait														
Flies														
Plug		1												1
USE ONLY ONE COLU	MN PE	R FI	SHERN	NAN										

Use reverse side for notes or remarks.

Signature of Interviewer_____

LAKE PEND OREILLE CREEL CENSUS BAYVIEW April, 1952

<u>Fishermen</u>	Sun. April 20	Sat. April 5	April 8	Weekdays April 10	April 18
Resident	111	189	39	2	9
Non-Resident	68	74	5	2	8
Commercial	3	0	<u>11</u>	<u>0</u>	<u>3</u>
Total	182	263	55	4	20
Hours Fished					
Resident	633.0	968.4	189.8	8.0	65.0
Non-Resident	354.5	426.5	20.0	8.0	8.0
Commercial	16.0	0	74.2	0.	23.0
Total	1,003.5	1,394.9	284.0	16.0	96.0
Fish Caught					
Resident					
Silvers	256	35	199	0	146
Whitefish	3	8	17	0	0
Non-Resident					
Silvers	66	50	22	0	0
Whitefish	0	99	0	0	0
Commercial					
Silvers	31	0	458	0	209
Whitefish	0	0	7	0	0
Total					
Silvers	353	85	679	0	355
Whitefish	3	107	24	0	0

June 25, 1952 D. R. Embody

LAKE PEND OREILLE CREEL CENSUS GARFIELD April, 1952

	Sun.	Sat.		kdays	
Fishermen	April 27	April 26	April 11	April 22	April 29
Resident	156	34	6	8	4
Non-Resident	15	2	1	0	0
Commercial	5	_7	_7	<u>0</u>	2
Total	176	43	14	8	6
Hours Fished					
Resident	885.7	147.5	34.0	45.0	18.6
Non-Resident	90.0	12.0	5.0	0	0
Commercial	_23.0	21.0	<u>25.0</u>	<u>0</u>	12.0
Total	998.7	180.5	64.0	45.0	30.6
Fish Caught					
Resident					
Silvers Sucker	353 1	8	22 0	380 0	0
Non-Resident					
Silvers	41	9	4	0	0
Commercial Silvers	3	0	10	0	24
Total					
Silvers Sucker	397 1	17 0	36 0	380 0	24 0

D. R. Embody January 21, 1953

LAKE PEND OREILLE CREEL CENSUS HOPE April, 1952

	Sun.	Sat.		eekdays	
<u>Fishermen</u>	April 13	April 12	April 9	April 15	April 28
Resident	8	4	No Fishing	2	6
Non-Resident	1	0		0	0
Commercial	<u>0</u>	<u>0</u>		<u>0</u>	<u>0</u>
Total	9	4		2	6
Hours Fished					
Resident	32	20		6	25
Non-Resident	_4	_0		<u>0</u>	<u>0</u>
Total	36	20		6	25
Fish Caught					
Resident					
Silvers	0	0		0	22
Whitefish	0	21		1	11
Non-Resident					
Silvers	0	0		0	0
Total					
Silvers	0	0		0	22
Whitefish	0	21		1	11

LAKE PEND OREILLE CREEL CENSUS SANDPOINT April, 1952

Fishermen	Sun. April 6	Sat. April 19	April 1	Weekdays April 3	April 30
Resident	17	9	4	No Fishing	No Fishing
Non-Resident	1	0	0		
Commercial	0	0	0		
Total	18	9	4		
Hours Fished					
Resident	51	25	16		
Non-Resident	_5	_0	_0		
Total	56	25	16		
Fish Caught					
Resident					
Silvers	0	0	0		
Whitefish	12	0	0		
Perch	_8_	<u>20</u>	<u>80</u>		
Non-Resident					
Silvers	0	0	0		
Total					
Whitefish	12	0	0		
Perch	8	20	80		

LAKE PEND OREILLE CREEL CENSUS

BAYVIEW

May, 1952

<u>Fishermen</u>	Sun. May 18	Sat. May 10	May 2	Weekdays <u>May 6</u>	<u>May 29</u>
Resident	319	49	10	9	35
Non-Resident	241	81	3	2	51
Commercial	_10	9	0	_1	_3
Total	570	139	13	12	89
Hours Fished					
Resident	1,981.0	329.9	70.0	28.3	174.5
Non-Resident	1,544.5	528.2	19.0	14.0	262.1
Commercial	90.0	80.0	0	12.5	24.0
Total	3,615.5	938.1	89.0	54.8	460.6
Fish Caught					
Resident					
Silvers	6,014	581	47	2 4	213
Cutthroat	0	1	0	2	3
Dolly Varder	n 2	0	0	0	2
Rainbow	2	0	0	0	0
Whitefish	1	0	0	0	0
Squawfish	4	0	0	0	2
Non-Resident					
Silvers	4,143	908	11	7	789
Cutthroat	0	5	0	0	2
Dolly Varden	ι 8	4	0	0	2
Rainbow	1	1	0	0	0
Commercial					
Silvers	1,153	1,225	0	400	550
Dolly Varden		3	0	0	0
Total					
Silvers Cutthroat	11,310 0	2,714 6	58 0	431 2	1,552 5
Dolly Varden	13	7	0	0	4
Rainbow	3	1	0	0	0
Whitefish	1	0	0	0	0
Squawfish	4	0	0	0	2
	-			_	

D. R. Embody January 21, 1953

LAKE PEND OREILLE CREEL CENSUS GARFIELD May, 1952

<u>Fishermen</u>	Sun. May 11	Sat. <u>May</u> 24	<u>May 19</u>	Weekdays May 20	<u>May 26</u>
Resident	48	48	3	11	23
Non-Resident	8	17	3	1	4
Commercial	_4	_9	0	2	<u>11</u>
Total	60	74	6	14	38
Hours Fished					
Resident	264.5	247.5	13.0	28.1	99.5
Non-Resident	19.0	72.0	15.0	4.0	18.0
Commercial	97.0	<u>62.5</u>	<u>0</u>	6.0	83.0
Total	380.5	382.0	28.0	38.1	200.5
Fish Caught					
Resident					
Silvers	365	966	49	125	338
Cutthroat	2	4	0	0	3
Dolly Varden	3	4	0	0	1
Whitefish	5	6	0	0	0
Squawfish	1	0	0	0	0
Non-Resident					
Silvers	32	311	88	16	6
Cutthroat	2	0	0	0	0
Dolly Varden	0	1	0	0	0
Rainbow	1	0	0	0	0
Commercial					
Silvers	1,620	1,493	0	200	1,750
Total					
Silvers	2,017	2,770	137	341	2,094
Cutthroat	4	4	0	0	3
Dolly Varden	3	5	0	0	1
Rainbow	1	0	0	0	0
Whitefish	5	6	0	0	0
Squawfish	1	0	0	0	0

LAKE PEND OREILLE CREEL CENSUS HOPE May, 1952

Fishermen	SUN. May 25	SAT. May 3	<u>May 19</u>	Weekdays May 23	<u>May 28</u>
Resident	202	92	6	19	24
Non-Resident	23	27	5	6	3
Commercial	2	0	0	1	4
Total	227	119	11	26	31
Hours Fished					
Resident	851.5	428.3	44.4	61.2	57.0
Non-Resident	97.5	154.7	34.0	23.4	9.0
Commercial	12.0	<u>0</u>	<u>0</u>	<u>5.0</u>	20.0
Total	961.0	583.0	78.4	89.6	86.0
Fish Caught					
Resident Silvers	635	46	161	139	112
Cutthroat	9	8	0	0	3
Dolly Varden	12	29	14	19	6
Rainbow	5	2	0	1	0
Whitefish	5	9	0	2	1
Perch	25	1	0	0	0
Crappie	1	0	0	0	0
Bass	1	0	0	0	0
Squawfish	30	20	0	0	7
Non-Resident					
Silvers	137	14	286	47	11
Cutthroat	0	6	0	0	0
Dolly Varden	2	2	10	0	0
Rainbow	3	1	1	0	0
Whitefish	0	1	0	0	0
Commercial				EO	200
Silvers	3	0	0	58	300
Whitefish	6	0	0	0	0
Total					
Silvers	775	60	447	244	416
Cutthroat	9	14	0	0	3
Dolly Varden	14	31	24	19	6
Rainbow	8	3	1	1	0
Whitefish	11	10	0	2	1
Perch	25	1	0	0	0 0
Crappie	1	0	0	0	0
Bass	1	0	0	0	0
Squawfish	30	20	0	0	7

LAKE PEND OREILLE CREEL CENSUS SANDPOINT May, 1952

		May, 13	.52		
Fishermen	Sun. May4	Sat. May 17	<u>May 12</u>	Weekdays <u>May 13</u>	<u>May 27</u>
Resident	46	49	16	8	13
Non Resident	6	4	2	0	0
Commercial	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	52	53	18	8	13
Hours Fished					
Resident	208.1	171.5	80.0	26.0	143.3
Non-Resident	25.0	<u>25.0</u>	12.0	<u>0</u>	<u>0</u>
Total	233.1	196.5	92.0	26.0	143.3
Fish Caught					
Resident					
Silvers	1	77	27	0	11
Cutthroat	8	20	1	1	4
Dolly Varden	2	11	3	13	4 5
Rainbow	0	0	1	1	0
Whitefish	4	0	0	1	1
Perch	5	0	17	0	3
Squawfish	3	14	0	0	2
Non-Resident Silvers	11	21	12	0	0
Total					
Silvers	12	98	39	0	11
Cutthroat	8	20	1	1	14
Dolly Varden	2	11	3	13	5
Rainbow	0	0	1	1	0
Whitefish	4	0	0	1	1
Perch	5	0	17	0	3
Squawfish	3	14	0	0	2

LAKE PEND OREILLE CREEL CENSUS BAYVIEW

June, 1952

<u>Fishermen</u>	Sun. June 15	Sat. June 14	June 20	Weekdays June 23	<u>June 25</u>
Resident	1140	182	72	51	73
Non-Resident	201	2714	114	120	122
Commercial	<u>0</u>	2	<u>3</u>	<u>2</u>	<u>3</u>
Total	3141	458	189	173	198
Hours Fished					
Resident	661.1	1,001.9	505.1	312.1	440.1
Non-Resident	988.2	1,418.8	685.2	6214.2	694.3
Commercial	<u>0</u>	14.0	<u>7.5</u>	<u>18.0</u>	18.0
Total	1,6149.3	2,434.7	1,197.8	954.3	1,152.4
Fish Caught					
Resident					
Silvers Cutthroat	919 8	1,660 8	1,171 11	621 22	1,416 10
Dolly Varden	3	0	16	3	0
Rainbow	0	0	1	0	1
Squawfish	0	0	2		1
Peanose	14	0	0	0	13
Non-Resident					
Silvers	1,5145	2,612	1,547	1,288	1,795
Cutthroat	35	55	22	29	26
Dolly Varden	8	5	2	8	0
Rainbow	1	1	1	2	2
Whitefish	2	0	0	0	0
Squawfish Peanose	1	1 0	2	3 1	0
Commercial					
Silvers	0	83	90	30	130
Total					
Silvers	2,464	4,355	2,808	1,939	3,341
Cutthroat	43	63	33	51	36
Dolly Varden	11	5	18	11	0
Rainbow Whitefish	1	1	2	2	3
wniterisn Squawfish	2 1	0 1	0 14	0	0 1
Peanose	4	0	0	1	16
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LAKE PEND OREILLE CREEL CENSUS GARFIELD June, 1952

Fishermen	Sun. June 29	Sat. June 28	June 4	Weekdays June 11	June 27
Resident	14	22	15	8	11
Non-Resident	40	31	5	18	14
Commercial	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>0</u>
Total	54	53	20	28	25
Hours Fished					
Resident	56.5	103.0	70.4	24.0	32.0
Non-Resident	160.0	163.0	33.0	69.6	63.0
Commercial	0	<u>0</u>	<u>0</u>	8.0	<u>0</u>
Total	216.5	266.0	103.4	101.6	95.0
Fish Caught					
Resident					
Silvers	97	184	133	58	114
Cutthroat	4	6	0	1	4
Dolly Varden	0	1	2	0	0
Rainbow	0	1	1	0	0
Non-Resident					
Silvers	248	292	69	216	147
Cutthroat	3	2	0	1	3
Dolly Varden	3	1	0	0	0
Squawfish	5	3	0	0	0
Commercial					
Silvers	0	0	0	20	0
Cutthroat	0	0	0	1	0
Total Silvers Cutthroat	345 7	476 8	202 0	294 3	261 7
Dolly Varden	3	2	2	0	0
Rainbow	0	1	1	0	0
Squawfish	5	3	0	0	0

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LAKE PEND OREILLE CREEL CENSUS HOPE

June, 1952

Fishermen	Sun. June 1	Sat. June 21	June 12	Weekdays June 16	June 17
Resident	116	14	2	0	42
Non-Resident	37	3	2	43	35
Commercial	<u>3</u>	2	<u>0</u>	<u>0</u>	<u>1</u>
Total	156	19	4	43	78
Hours Fished					
Resident	457.0	58.2	4.0	0	147.0
Non-Resident	181.2	18.0	8.0	73.5	173.9
Commercial	21.0	12.0	<u>0</u>	<u>0</u>	<u>6.0</u>
Total	659.2	88.2	12.0	73.5	326.9
Fish Caught					
Resident					
Silvers	529	44	7	0	212
Cutthroat	3 14	1 4	2	0 0	1 1
Dolly Varden Rainbow	2	1			
			0	0	4
Whitefish	10	0	0	0	0
Perch Squawfish	24 3	0	0 2	0 0	1 0
Peanose	0	0	0	0	14
Non-Resident					
Silvers	192	9	10	171	230
Cutthroat	2	0	0	1	2
Dolly Varden	3	0	0	3	0
Rainbow	0	0	0	3	2
Whitefish		0	0	0	0
Squawfish	3	0	0	2	1
Commercial					
Silvers	230	58	0	0	13
Whitefish	0	3	0	0	0
Perch	0	12	0	0	0
Total					
Silvers	951	111	17	171	455
Cutthroat	5	1	2	1	3
Dolly Varden	17	4	0	3	1
Rainbow	2	1	0	3	6
Whitefish	11	3	0	0	0
Perch	24	12	0	0	1
Squawfish	6	0	2	2	1
Peanose	0	0	0	0	14

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LAKE PEND OREILLE CREEL CENSUS SANDPOINT June, 1952

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LAKE PEND OREILLE CREEL CENSUS BAYVIEW

July, 1952

	_	July, 1952			
Fishermen	Sun. <u>July 20</u>	Sat. July 12	July 3	Weekdays July 11	July 15
Resident	144	95	105	48	31
Non-Resident	241	213	109	71	86
Commercial	<u>1</u>	<u>1</u>	<u>3</u>	<u>2</u>	<u>0</u>
Total	386	309	217	121	117
Hours Fished					
Resident	711.8	498.2	587.3	273.5	196.9
Non-Resident	1,231.4	1,268.9	712.4	408.0	524.1
Commercial	4.0	6.0	3.0	8.0	0
Total	1,947.2	1,773.1	1,302.7	689.5	721.0
Fish Caught					
Resident					
Silvers	206	4.4.1	1,141	298	151
Cutthroat	396 11	441 8	4	3	0
Dolly Varden	4	0	0	1	0
Rainbow	2	0	0	2	0
Perch	0	1	0	0	0
Squawfish	9	8	2	0	9
Peanose	0	4	0	0	0
Bluegill	0	1	0	0	0
Non-Resident					
Severs	831	1,326	1,442	382	655
Cutthroat	59	20	10	24	7
Dolly Varden	12	2	4	1	1
Rainbow	2	2	0	0	0
Whitefish	0	0	0	2	0
Perch	0	2	0	0	0
Squawfish	2	14	0	0	0
Peanose	0	4	1	0	0
Commercial		_		_	
Silvers Cutthroat	1 0	0 1	50 0	3 0	0
Total Silvers	1,228	1,767	2,633	683	806
Cutthroat	70		14	27	7
Cutthroat Dolly Varden	70 16	29 2	14 4	2 /	1
Rainbow	4	2	0	2	0
Whitefish	0	0	0	2	0
Perch	0	3	0	0	0
Squawfish	11	22	2	0	9
Peanose	0	8	1	0	0
Bluegill	0	1	0	0	0

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LAKE PEND OREILLE CREEL CENSUS GARFIELD

July, 1952

		July, 195	2		
Fishermen	Sun. July 27	Sat. July 19	July 2	Weekdays July 24	July 25
rishermen	oury 27	oury 19	oury z	July 24	oury 25
Resident	49	15	15	5	15
Non-Resident	79	45	21	13	30
Commercial	0	0	_4	0	_4
Total	128	60	40	18	49
Hours Fished					
Resident	276.3	103.0	84.5	19.0	80.4
Resident	270.5	103.0	04.3		
Non-Resident	487.9	194.7	110.0	56.0	148.2
Commercial	0	0	32.0	0	31.0
					
Total	764.2	297.7	226.5	75.0	259.6
Fish Caught					
Resident					
	244	252	1.40	50	0.50
Silvers	344	268	149	59	269
Cutthroat	0	0	0	0	2
Dolly Varden	1	0	0	0	0
Rainbow	1	0	0	0	2
Non-Resident					
Silvers	492	316	152	203	232
Cutthroat	22	2	7	203 4	8
Dolly Varden	1	4	6	0	0
Rainbow	1	0	1	0	2
Whitefish	0	0	1	0	0
Crappie	0	0	1	0	0
Peanose	0	0	1	0	0
Sunfish	0	0	1	0	0
Bluegill	1	0	0	0	0
Commercial					
Silvers	0	0	131	0	126
Rainbow	0	0	1	0	0
Total					
Silvers	836	584	432	262	627
Cutthroat	22	2	7	4	10
Dolly Varden		4	6	0	0
Rainbow	2	0	2	0	4
Whitefish	0	0	1	0	0
Crappie	0	0	1	0	0
Peanose	0	0	1	0	0
Sunfish	0	0	1	0	0
Bluegill	1	0	0	0	0

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LAKE PEND OREILLE CREEL CENSUS HOPE July, 1952

<u>Fishermen</u>	Sun. July 13	Sat. July 26	July 8	Weekdays July 14	July 23
Resident	124	45	44	16	31
Non-Resident	53	52	40	28	37
Commercial	<u>1</u>	<u>1</u>	<u>0</u>	<u>1</u>	<u>2</u>
Total	178	98	84	45	70
Hours Fished					
Resident	644.5	199.9	188.6	75.5	108.0
Non-Resident	270.5	256.9	208.7	123.0	192.0
Commercial	3.0	<u>5.0</u>	<u>0</u>	4.0	12.0
Total	918.0	461.8	397.3	202.5	312.0
Fish Caught					
Resident Silvers	705	240	326	109	119
Cutthroat	14	1	0	2	2
Rainbow	0	0	1	0	0
Whitefish Perch	0 36	1	0	0	0 12
	0	69 1	0	0	0
Crappie Squawfish	2	5	3	0	5
Peanose	0	1	0	0	0
Sucker	0	1	0	0	0
Non-Resident					
Silvers	330	359	330	233	204
Cutthroat	0	3	4	4	2
Dolly Varden	0	6	1	0	0
Rainbow	0	1	0	0	1
Perch	13	0	4	0	2
Crappie	0	0	0	0	1
Squawfish	0	1	10	0	7
Peanose	1	0	0	0	0
Commercial Silvers	7	9	0	11	14
Total					
Silvers	1,042	608	656	353	337
Cutthroat	14	4	4	6	4
Dolly Varden	0	6	1	0	0
Rainbow	0	1	1	0	1
Whitefish	0	1	0	0	0
Perch	49	69	4	0	14
Crappie	0	1	0	0	1
Squawfish	2	6	13	0	12
Peanose	1	1	0	0	0
Sucker	0	1	0	0	0
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LAKE PEND OREILLE CREEL CENSUS SANDPOINT July, 1952

<u>Fishermen</u>	Sun. July 6	Sat. July 5	July 1	Weekdays July 10	July 29
Resident	64	22	20	24	14
Non-Resident	_6	_5	_4	_0	_3
Total	70	27	24	24	17
Hours Fished					
Resident	264.0	105.0	59.0	78.0	28.5
Non-Resident	22.0	17.0	16.0	0	<u>15.0</u>
Total	286.0	122.0	75.0	78.0	43.5
Fish Caught					
Resident					
Silvers Cutthroat	340 33	137 3	60 3	7 20	1 13
Dolly Varden	1	0	0	5	0
Rainbow	2	0	1	0	1
Perch	15	0	0	1	22
Crappie	0	0	0	0	6
Squawfish	10	0	3	0	2
Non-Resident					
Silvers	4 1	7	17	0	5
Cutthroat	1	0	1	0	0
Dolly Varden	1	0	0	0	0
Total					
Silvers	381	144	77	47	6
Cutthroat	34	3	4	20	13
Dolly Varden	2	0	0	5	0
Rainbow	2	0	1	0	1
Perch	15	0	0	1	22
Crappie	0	0	0	0	6
Squawfish	10	0	3	0	2

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LAKE PEND OREILLE CREEL CENSUS BAYVIEW August, 1952

Fishermen	Sun. Aug. 3	Sat. <u>Aug. 16</u>	Aug. 5	Weekdays Aug. 15	Aug. 27
Resident	83	48	37	12	29
Non-Resident	<u>175</u>	140	<u>35</u>	<u>51</u>	118
Total	258	188	72	63	147
Hours Fished					
Resident	509.0	239.5	206.8	53.0	135.0
Non-Resident	1,143.0	751.7	205.8	300.3	743.0
Total	1,652.0	991.2	412.6	353.3	878.0
Fish Caught					
Resident					
Silvers	252	278	110	48	163
Cutthroat	7	5	0	0	1
Whitefish	3	0	0	0	0
Perch	1	0	0	0	0
Crappie	7	0	0	0	0
Squawfish	5	2	0	0	1
Non-Resident					
Silvers	763	1,303	100	264	716
Cutthroat	35	40	1	8	10
Dolly Varden	4	1	0	0	2
Rainbow	3	4	1	0	0
Perch	0	5	0	0	2
Squawfish	3	0	2	0	1
Peanose	1	0	0	0	0
Total					
Silvers	1,015	1,581	210	312	879
Cutthroat	42	45	1	8	11
Dolly Varden	4	1	0	0	2
Rainbow	3	4	1	0	0
Whitefish	3	0	0	0	0
Perch	1	5	0	0	2
Crappie	7	0	0	0	0
Squawfish	8	2	2	0	2
Peanose	1	0	0	0	0

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LAKE PEND OREILLE CREEL CENSUS GARFIELD August, 1952

Fishermen	Sun. Aug. 10	Sat. Aug. 2	<u>Aug. 1</u>	Weekdays Aug. 18	Aug. 28
Resident	39	14	18	4	8
Non-Resident	67	37	28	9	24
Commercial	<u>1</u>	<u>1</u>	<u>4</u>	<u>1</u>	<u>4</u>
Total	107	52	50	14	36
Hours Fished					
Resident	241.2	58.0	82.0	10.5	37.0
Non-Resident	321.8	214.0	112.5	30.0	121.0
Commercial	4.0	8.0	16.0	2.0	25.0
Total	567.0	280.0	210.5	42.5	183.0
Fish Caught					
Resident					
Silvers	187	83	169	5	69
Cutthroat	2	2	0	0	0
Dolly Varden	0	1	0	0	0
Squawfish	0	0	1	0	0
Non-Resident					
Silvers	214	236	157	13	103
Cutthroat	9	8	0	0	7
Dolly Varden	3	1	0	0	0
Squawfish	1	3	0	0	0
Commercial					
Silvers	2	50	77	2	110
Total					
Silvers	403	369	403	20	282
Cutthroat	11	10	0	0	7
Dolly Varden	3	2	0	0	0
Squawfish	1	3	1	0	0

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LAKE PEND OREILLE CREEL CENSUS HOPE August, 1952

Fishermen	Sun. Aug. 17	Sat. Aug. 30	Aug. 13	Weekdays Aug. 20	Aug. 22
Resident	78	56	21	28	16
Non-Resident	55	38	40	34	32
Commercial	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>3</u>
Total	134	94	61	62	51
Hours Fished					
Resident	348.5	290.0	75.5	129.2	75.1
Non-Resident	302.0	219.5	176.5	186.0	155.6
Commercial	2.0	<u>0</u>	<u>0</u>	<u>0</u>	18.0
Total	652.5	509.5	252.0	315.2	248.7
Fish Caught					
Resident Silvers	155	228	55	85	47
Cutthroat	16	2	1	7	0
Dolly Varden	8	6	0	0	0
Rainbow	3	0	0	1	0
Perch	37	4	0	14	0
Crappie	4	0	0	0	0
Bass	0	3	0	5	
Squawfish	0	1	1	0	0
Non-Resident					
Silvers	177	126	125	137	68
Cutthroat	2	1	2	4	0
Dolly Varden	5	0	0	1	2
Rainbow	1	1	0	0	0
Perch	23	0	21	1	13
Bass	0	0	0	0	1
Squawfish	1	0	0	1	1
Commercial					
Silvers	0	0	0	0	28
Total					
Silvers	332	354	180	222	143
Cutthroat	18	3	3	11	0
Dolly Varden	13	6	0	1	2
Rainbow	4	1	0	1	0
Perch	60	4	21	15	13
Crappie	4	0	0	0	0
Bass	0	3	0	5	1
Squawfish	1	1	1 D. R. Embody January 21, 1953	1	1

LAKE PEND OREILLE CREEL CENSUS SANDPOINT August, 1952

<u>Fishermen</u>	Sun. Aug. 31	Sat. Aug. 9	<u>Aug. 7</u>	Weekdays Aug. 26	Aug. 29
Resident	32	6	14	16	15
Non-Resident	<u>2</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>3</u>
Total	34	8	14	16	18
HoursFished					
Resident	103.5	22.0	45.	0 49.0	56.5
Non-Resident	4.0	8.0	<u>0</u>	<u>0</u>	13.0
Total	107.5	30.0	45.	0 49.0	69.5
Fish Caught					
Resident					
Silvers	12	3	3	4	13
Cutthroat	8	2	9	0	9
Dolly Varden	3	0	0	0	0
Rainbow	0	0	0	1	0
Whitefish	0	1	0	0	0
Perch	162	15	111	129	64
Crappie	11	0	10	0	1
Squawfish	2	3	2	0	0
Non-Resident					
Silvers	0	0	0	0	2
Cutthroat	0	1	0	0	0
Perch	0	0	0	0	8
Squawfish	0	3	0	0	0
Total					
Silvers	12	3	3	4	15
Cutthroat	8	3	9	0	9
Dolly Varden	3	0	0	0	0
Rainbow	0	0	0	1	0
Whitefish	0	1	0	0	0
Perch	162	15	111	129	72
Crappie	11	0	10	0	1
Squawfish	2	6	2	0	0

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LAKE PEND OREILLE CREEL CENSUS BAYVIEW September, 1952

<u>Fishermen</u>	Sun. Sept. 28	Sat. <u>Sept</u> . 20	Sept. 18	Weekdays Sept. 22	<u>Sept. 30</u>
Resident	122	71	28	23	18
Non-Resident	286	242	48	47	57
Commercial	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	409	313	76	70	75
Hours Fished					
Resident	725.9	428.5	185.5	150.6	101.0
Non-Resident	1,762.0	1,523.1	328.9	319.6	432.0
Commercial	6.0	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	2,493.9	1,951.6	514.4	470.2	533.0
Fish Caught					
Resident					
Silvers	1,101	415	225	267	193
Cutthroat	3	0	0	0	1
Dolly Varden	2	1	0	0	0
Rainbow	0	1	0	0	0
Crappie	0	0	0	1	0
Squawfish	0	2	0	0	0
Non-Resident					
Silvers	3,124	1,803	493	451	884
Cutthroat	34	10	4	7	4
Dolly Varden	1	2	0	0	0
Rainbow	0	3	0	0	0
Commercial					
Silvers	20	0	0	0	0
Total Silvers	4,245	2,218	718	718	1,077
Cutthroat	37	10	4	7 1 7	5
Dolly Varden	3	3	0	0	0
Rainbow	0	4	0	0	0
Crappie	0	0	0	1	0
Squawfish	0	2	0	0	0
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LAKE PEND OREILLE CREEL CENSUS GARFIELD September. 1952

<u>Fishermen</u>	Sun. Sept. 21	Sat. Sept. 13	Sept. 5	Weekdays Sept. 8	<u>Sept. 26</u>
Resident	65	27	7	7	18
Non-Resident	86	70	18	9	29
Commercial	<u>1</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>0</u>
Total	152	97	27	17	47
Hours Fished					
Resident	360.5	103.8	18,7	40.0	88.0
Non-Resident	523.0	350.0	102.5	61.0	141.0
Commercial	9.0	<u>0</u>	13.0	8.0	<u>0</u>
Total	892.5	453.8	134.2.	109.0	229.0
Fish Caught					
Resident					
Silvers	404	106	63	98	131
Cutthroat	1	1	0	2	1
Dolly Varden	2	1	0	0	3
Rainbow	1	0	0	0	0
Squawfish	0	1	0	0	0
Non-Resident					
Silvers	720	508	143	108	215
Cutthroat	4	8	0	0	5
Dolly Varden	12	0	0	0	2
Rainbow	3	0	0	0	0
Commercial					
Silvers	50	0	91	30	0
Total					
Silvers	1,174	614	297	236	346
Cutthroat	5	9	0	2	6
Dolly Varden	14	1	0	0	5
Rainbow	4	0	0	0	0
Squawfish	0	1	0	0	0

D. R. Embody January 5, 1953

LAKE PEND OREILLE CREEL CENSUS

HOPE September, 1952

<u>Fishermen</u>	Sun. Sept. 14	September, 1952 Sat. Sept. 27	Sept. 9	Weekdays Sept. 11	<u>Sept. 23</u>
Resident	76	29	9	9	25
Non-Resident	49	15	13	28	22
Commercial	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>0</u>
Total	125	44	22	38	47
Hours Fished					
Resident	347.1	116.8	33.0	46.0	125.0
Non-Resident	268.0	68.5	62.0	161.1	148.8
Commercial	<u>0</u>	<u>0</u>	<u>0</u>	3.0	<u>0</u>
Total	615.1	183.3	95.0	190.1	273.8
Fish Caught					
Resident					
Silvers	362	80	39	75	131
Cutthroat	9	3	1	0	0
Dolly Varden	7	0	0	2	6
Rainbow	2	0	1	0	0
Perch	79	52	0	0	54
Crappie	0	1	0	0	0
Bass	2	1	0	0	0
Squawfish	2	3	0	0	2
Sunfish Sucker	2	0	0	0	0
	Ü	Ü	O	Ü	1
Non-Resident					
Silvers	312	30	72	152	196
Cutthroat	1	3	1	0	0
Dolly Varden	2	0	0	4	1
Whitefish	0	1	0	0	0
Perch	15	0	0	50	0
Bass	1	0		0	0
Squawfish	1	0	0	0	0
Commercial					
Dolly Varden	0	0	0	1	0
Total					
Silvers	676	110	111	227	327
Cutthroat	10	6	2	0	0
Dolly Varden	9	0	0	7	7
Rainbow	2	0	1	0	0
Whitefish	0	1	0	0	0
Perch	94	52	0	50	54
Crappie	0	1	0	0	0
Bass	3	1	0	0	0
Squawfish	3	3	0	0	2
Sunfish	2	0	0	0	0
Sucker	0	0	0	0	1
			Embody		

January 2, 1953

LAKE PEND OREILLE CREEL CENSUS SANDPOINT September, 1952

<u>Fishermen</u>	Sun. Sept. 7	Sat. Sept. 6	Sept. 4	weekdays Sept. 19	Sept. 25
Resident	40	7	10	13	28
Non-Resident	<u>11</u>	<u>1</u>	<u>5</u>	<u>1</u>	<u>0</u>
Total	51	8	15	14	28
Hours Fished					
Resident	166.1	25.0	35.0	47.9	80.0
Non-Resident	39.6	2.0	16.0	4.0	<u>0</u>
Total	205.7	27.0	51.0	51.9	80.0
Fish Caught					
Resident					_
Silvers	32	1	0	0	0
Cutthroat	8	0	4	2	2
Dolly Varden	0	0	2	0	0
Perch	178	14	106	78	289
Crappie	16	0	0	0	0
Bass	2	0	0	0	0
Squawfish	0	0	0	0	1
Sunfish	0	0	0	14	0
Peanose	0	0	0	7	0
Tench	0	0	0	2	0
Non-Resident					
Silvers	35	2	0	0	0
Perch	0	0	32	6	0
Sunfish	0	0	0	1	0
Sucker	4	0	0	0	0
Total					
Silvers	67	3	0	0	0
Cutthroats	8	0	4	2	2
Dolly Varden	0	0	2	0	0
Perch	178	14	138	84	289
Crappie	16	0	0	0	0
Bass	2	0	0	0	0
Squawfish	0	0	0	0	1
Sunfish	0	0	0	15	0
Peanose	0	0	0	7	0
Sucker	4	0	0	0	0
Tench	0	0	0	2	0

D. R. Embody January 2, 1953

<u>Fishermen</u>	Sun. Oct. 26	Sat. Oct. 25	<u>Oct. 7</u>	Weekdays Oct. 8	Oct. 22
Resident	102	62	29	30	18
Non-Resident	193	154	<u>87</u>	<u>82</u>	<u>58</u>
Total	295	216	116	112	76
Hours Fished					
Resident	630.5	353.7	201.3	173.3	103.5
Non-Resident	1,053.0	920.4	537.3	560.9	359.6
Total	1,683.5	1,274.1	738.6	734.2	463.1
Fish Caught					
Resident					
Silvers	1,099	728	453	422	275
Cutthroat	4	1	1	0	0
Non-Resident					
Silvers	2,272	2,041	1,101	1,362	1,224
Cutthroat	7	4	8	0	0
Dolly Varden	0	2	0	0	2
Squawfish	0	0	0	2	0
Total					
Silvers	3,371	2,769	1,554	1,784	1,499
Cutthroat	11	5	9	0	0
Dolly Varden	0	2	0	0	2
Squawfish	0	0	0	2	0

D. R. Embody January 9, 1953

LAKE PEND OREILLE CREEL CENSUS GARFIELD October, 1952

Fishermen	Sun. Oct. 5	Sat. Oct. 18	<u>Oct. 2</u>	Weekdays Oct. 9	Oct. 16
Resident	53	26	19	6	6
Non-Resident	105	34	24	14	10
Total	158	60	43	20	16
Hours Fished					
Resident	284.0	1543	122.1	35.0	36.0
Non-Resident	651.9	216.1	147.6	108.5	<u>56.0</u>
Total	935.9	370.4	269.7	143.5	92.0
Fish Caught					
Resident					
Silvers	317	294	154	77	133
Cutthroat	2	1	0	7	0
Dolly Varden	2	8	5	0	1
Non-Resident					
Silvers	1,153	299	228	207	70
Cutthroat	2	0	1	0	0
Dolly Varden	7	1	1	0	0
Squawfish	2	0	0	0	0
Total					
Silvers	1,470	593	382	284	203
Cutthroat	4	1	1	7	0
Dolly Varden	9	9	6	0	1
Squawfish	2	0	0	0	0

D. R. Embody January 5, 1953

LAKE PEND OREILLE CREEL CENSUS HOPE October, 1952

Fishermen	Sun. Oct. 19	Sat. Oct. 4	<u>Oct. 1</u>	Weekdays Oct. 23	Oct. 28
Resident	28	37	23	13	No Fishing
Non-Resident	10	36	<u>15</u>	<u>2</u>	
Total	38	73	38	15	
Hours Fished					
Resident	110.0	156.0	112.0	49.0	
Non-Resident	50.0	198.0	88.5	8.0	
Total	160.0	352.0	200.5	57.0	
Fish Caught					
Resident					
Silvers	100	112	170	40	
Cutthroat	0	7	0	0	
Dolly Varden	4	5	0.	0	
Perch	6	42	78	0	
Bass	0	Q	0	1	
Squawfish	0	1	0	0	
Sunfish	0	0	6	0	
Non-Resident					
Silvers	74	153	148	20	
Cutthroat	2	1	2	0	
Dolly Varden	0	0	5	0	
Rainbow	0	0	1	0	
Perch	0	8	18	0	
Crappie	0	1	0	0	
Bass	0	3	0	0	
Sunfish	0	4	0	0	
Total					
Silvers	174	265	318	60	
Cutthroat	2	8	2	0	
Dolly Varden	4	5	5	0	
Rainbow	0	0	1	0	
Perch	6	50	96	0	
Crappie	0	1	0	0	
Bass	0	3	0	1	
Squawfish	0	1	0	0	
Sunfish	0	4	6	0	

D. R. Embody January 2, 1953

LAKE PEND OREILLE CREEL CENSUS SANDPOINT October, 1952

<u>Fishermen</u>	Sun. Oct. 12	Sat. Oct. 11	Oct. 14	Weekdays _Oct. 15	Oct. 17	
Resident	24	17	7	13	19	
Non-Resident	<u>3</u>	0	<u>0</u>	0	<u>1</u>	
Total	27	17	7	13	20	
Hours Fished						
Resident	103.0	65.0	22.0	53.0	66.0	
Non-Resident	18.0	<u>0</u>	<u>0</u>	<u>0</u>	3.0	
Total	121.0	65.0	22.0	53.0	69.0	
Fish Caught						
Resident						
Silvers	3	16	0	0	10	
Cutthroat	0	4	0	1	0	
Dolly Varden	1	0	0	0	0	
Perch	196	113	104	181	159	
Crappie	0	2	0	0	137	
Squawfish	1	0	0	0	0	
Bluegill	0	0	4	0	0	
Bullhead	0	0	2	0	0	
Non-Resident						
Silvers	9	0	0	0	0	
Total						
Silvers	12	16	0	0	10	
Cutthroat	0	4	0	1	0	
Dolly Varden	1	0	0	0	0	
Porch	196	113	104	181	159	
Crappie	0	2	0	0	137	
Squawfish	1	0	0	0	0	
Bluegill	0	0	4	0	0	
Bluehead	0	0	2	0	0	

D. R. Embody January 2, 1953

Appendix B. Levels and Temperatures (2 ft. below surface) of Water, Pend Oreille Lake, Idaho, 1952 (Readings were made at 7 a.m. daily at Kenmor Marina dock, Sandpoint, Idaho

Day : of :	April	:	May	:	June	:	July	:	August :	Sept	ember	:	October	
	_		Level : Temp	. :	Level : Ter		Level : Tem		_	_		:	Level : Temp.	
1			2056.7	40 F	2059.05	59 F	2061.32	59 F	2062.26	71 F			2060.45	62 F
2	2048.8		57.15	49	58.8	57	61.47	60	62.28	68	2061.68			
3			57.45	51	58.52	59	61.6	64			61.69		60.48	62
4					58.2	55			62.28	72	61.72		60.56	61
5	48.92		57.89	48	57.95	58	61.74	61	62.29	72	61.74			
6					57.8	62	61.84		62.3	72	61.79	66	60.68	60
7	49				57.83	59	61.9	61	62.39	71			60.77	
8			58.46	51			61.94	64	62.35	70	61.93			
9	49.5		58.58	50	58.04	62	61.91	68	62.4	69	61.99	63	60.90	60
10	49.53	39.5	F 58.68	54	58.11	62	61.78	70			62.10	63	60.96	
11		47			58.2	58	61.65	69	62.55	68	62.13	63	61.04	60
12	49.85	44	58.98	56	58.26	57	61.58	66	62.43	69	62.20	63		
13			59.1	56	58.52	55			62.43	70	62.11	62		59
14	50.12	49	59.3	52	58.95	58	61.8	66	62.18	69			61.11	58
15		42			59.5	57	61.9	67	62.13	68	61.92	61		58
16		46	59.65	55	59.78	56	62.01	66	62.1	68	61.77	62		57
17	50.62	50	59.84	56	59.44	55	62.05				61.62	62	60.98	57
18		52	60.05	56	60.1	56	62.08	66	62.1	68	61.50	63	60.80	56
19		51	60.27	56	60.17	60	62.1	68	62.04	67	61.41	63		
20	51.55	42	60.45	53	60.2	61			62.03	68	61.30	е8	60.48	66
21		48	60.62	51	60.26	60	62.22	65	61.84	68			60.3	57
22	52.3	52	60.78	55			62.38	64		68	61.78	63	60.19	56
23	52.68	52	60.88	56	60.42	58	62.19	66						
24	53.0	51	60.9	59	60.55	59	62.19	65					60.22	57
25	53.28	55	60.88	59	60.68	60		65		68	61.52	64	60.14	56
26	53.62	54	60.72	56	60.81	62	62.09	66	61.7	67				
27			60.43	58	60.95	64				68	61.48	63	60.88	55
28	54.78	49	60.11	59	61.05	65	62.11	68	61.64	67	01.10	0.5	60.68	54
29	55.48	48	59.85	58	61.1	63	V2.11	69	01.01	68	61.42	62	60.45	54
30	56.1	50	59.6	57	61.2	55	62.18	70	61.65	66	61.38		60.24	54
31	59.35	59	59.35	59	01.2	55	62.22	72	01.03	50	01.30	02	59.02	54

 $\mbox{APPENDIX C} \label{eq:appendix}$ Climatological data. lake Pend Oreille, Idaho $\underline{1}/$

	' Temperati	ure	,Precip.	'Depart. '	No. of'	Number of Days		
Month	' Lv. Max.	' Av. Min.'	(in.)	'fromNor'	Days'	Cloudy '	Part. Cl.'	Clear
{1951)								
January	33.3	20.3	5.15	1.41	19	21	5	5
February	37.5	23.4	3.80	0.82	12	15	5	8
March	40.6	23.4	2.56	-0.12	13	15	11	5
April	60.7	30.3	0.46	-1.40	5		3	21
May	66.9	40.9	1.67	-0.35	13	11	6	14
June	71.7	43.5	1.80	-0.21	9	5	13	12
July	83.1	47.9	1.21	0.55	4	2	5	Z4
August	79.8	47.5	1.34	-0.41	6	9	7	15
September	68.6	40.7	2.14	0.41	9	10	3	17
October	50.9	36.9	9.59	6.62	20	21	5	5
November	41.6	30.5	3.70	-0.20	13	17	7	6
December	27.5	17.5	4.92	0.57	11	18	12	1
		(totals)	38.34	(/8.51)	134	150	82	133
(1952)								
January	29.2	19.0	5.11	1.37	22	24	6	1
February	37.5	21.5	1.85	-1.13	11	16	6	7
March	43.2	25.9	1.53	-1.15	9	14	5	12
April	60.6	34.7	1.09	-0.77	5	8	5	17
May	67.6	41.2	0.65	-1.37	9	12	5	14
June	71.8	45.4	3.45	1.44	14	12	10	8
July	81.1	47.9	0.13	-0.53	5	5	13	13
August	81.3	46.5	0.29	-0.64	5	5	23	3
September	74.3	40.8	0.86	-0.87	5	4	17	9
October	64.1	30.9	0.48	-2.49	4	2	21	8
November	41.3	24.3	0.84	-3.06	9	12	10	8
December	34.2	26.0	5.74	1.39	<u>23</u>	28	<u>1</u>	2
			22.02	(-7.81)	121	131	127	108

 $[\]underline{1}$ / From Idaho State Experimental Farm at Sandpoint

